

## **REMARKS**

Claims 1-20 were pending. Claims 1, 4-11 and 13-20 have been amended to clarify the invention and introduce new dependencies. Claims 3 and 12 have been canceled without prejudice. New claims 21-47 have been added. Support for the amended and new claims can be found throughout the specification, for example, as set forth in the chart below. No new matter is introduced. Thus, claims 1, 2, 4-11, and 13-47 will be pending upon entry of the amendments made herein.

<b>AMENDED/NEW CLAIMS</b>	<b>SUPPORT IN THE SPECIFICATION</b>
1	p. 23, lines 31-32
4	p. 35, lines 1- 10
5	p. 3, lines 26-29; p. 14, lines 4-15
6 “at least one hybrid antigen; at least one heat shock protein:”  “antigenic domain of infectious agent:”	p. 33, line 29 to p. 34, line 1; p. 34, lines 15-16  p. 3, lines 26-29; p. 14, lines 4-15
7	p. 31, lines 9-13
8	p. 3, lines 26-29; p. 14, lines 4-15
9 “at least one hybrid antigen; at least one heat shock protein:”  “antigenic domain of infectious agent:”	p. 33, line 29 to p. 34, line 1; p. 34, lines 15-16  p. 3, lines 26-29; p. 14, lines 4-15
10	p. 31, lines 9-13
11	p. 23, lines 31-32
13	p. 35, lines 1-10
14	p. 3, lines 26-29; p. 14, lines 4-15
15 “at least one hybrid antigen; at least one heat shock protein:”  “antigenic domain of infectious agent:”	p. 33, line 29 to p. 34, line 1; p. 34, lines 15-16  p. 3, lines 26-29; p. 14, lines 4-15
16	p. 31, lines 9-13
17	p. 3, lines 26-29; p. 14, lines 4-15
18 “at least one hybrid antigen; at least one heat shock protein:”  “antigenic domain of infectious agent:”	p. 33, line 29 to p. 34, line 1; p. 34, lines 15-16  p. 3, lines 26-29; p. 14, lines 4-15
19	p. 31, lines 9-13
20	p. 23, lines 31-32

21	Original claim 5
“method for inducing immune response:”	p. 5, lines 18-24; p. 5, line 28 to p. 6, line 5; p. 13, lines 19-23; p. 33, lines 8-9;
“antigenic domain of tumor antigen:”	p. 3, lines 26-29; p. 14, lines 4-15
22	Original claim 6
“at least one hybrid antigen; at least one heat shock protein:”	p. 33, line 29 to p. 34, line 1; p. 34, lines 15-16
“method for inducing immune response administering complex:”	p. 6, line 28 to p. 7, line 5; p. 13, lines 19-23; p. 33, lines 8-9
“antigenic domain of tumor antigen:”	p. 3, lines 26-29; p. 14, lines 4-15
23	p. 31, lines 9-13
24	Original claim 8
“method for treating cancer:”	p. 3, lines 27-29; p. 10, lines 3-10; p. 12, lines 13-18
“antigenic domain of tumor antigen:”	p. 3, lines 26-29; p. 14, lines 4-15
25	Original claim 9
“at least one hybrid antigen; at least one heat shock protein:”	p. 33, line 29 to p. 34, line 1; p. 34, lines 15-16
“method for treating cancer comprising administering complex:”	p. 3, lines 27-29; p. 8, line 30 to p. 9, line 6; p. 12, lines 13-18
“antigenic domain of tumor antigen:”	p. 3, lines 26-29; p. 14, lines 4-15
26	p. 31, lines 9-13
27	p. 20, lines 1-3
28	p. 3, lines 26-29; p. 14, lines 4-15
29	p. 3, lines 26-29; p. 14, lines 4-15 and lines 16-18
30	p. 12, lines 10-13; p. 14, lines 16-25;
31	p. 12, lines 7-9; p. 14, lines 26-28
32	p. 12, lines 7-9; p. 14, lines 26-28
33	p. 14, line 28 to p. 15, line 3
34	p. 12, lines 7-9; p. 14, lines 26-28
35	p. 14, line 28 to p. 15, line 3
36	p. 12, lines 7-9; p. 14, lines 26-28
37	p. 14, line 28 to p. 15, line 3
38	
“composition comprising complex:”	p. 3, lines 24-26; p. 32, lines 19-22; p. 34, lines 15-16; p. 40, line 9 to p. 41, line 4; p. 41, lines 17-29; p.

	43, lines 26-27; p 44, lines 11-12; p. 47, lines 3-5
“pharmaceutically acceptable carrier:”	p. 35, lines 1- 10
39	p. 31, lines 9-13
40	p. 21, lines 1-2; p. 31, lines 9-13
41	p. 35, lines 16-17
42	p. 35, lines 16-17
43	p. 33, line 29 to p. 34, line 5; p. 34, lines 15-16
44	
Plurality of hybrid antigens/ heat shock proteins:	p. 33, line 29 to p. 34, line 5; p. 34, lines 15-16
Plurality of hybrid antigens/ heat shock proteins:	6, 9, 15 and 18; p. 7, line 5; p. 9, line 6;
45	p. 32, line 23
46	p. 32, line 23
47	p. 32, line 23

### **ELECTION/RESTRICTIONS**

The Examiner has required a restriction to one of the following inventions under 35 U.S.C. § 121:

- I. Claims 1-4, and 11-13, drawn to a hybrid antigen comprising at least one antigenic domain of an infectious agent or tumor antigen and a binding domain that non-covalently binds to a heat shock protein, classified in class 530, subclass 350.
- II. Claims 5-7, and 14-16, drawn to a method for inducing an immune response to an infectious agent or tumor antigen, comprising administering a hybrid antigen and heat shock protein, classified in class 514, subclass 2.
- III. Claims 8-10, and 17-19, partially drawn to a method for treating an infectious disease comprising administering a hybrid antigen and heat shock protein, classified in class 514, subclass 2.
- IV. Claims 8-10, and 17-19, partially drawn to a method for treating cancer comprising administering a hybrid antigen and heat shock protein, classified in class 514, subclass 2.

- V. Claim 20, drawn to a peptide that is Asn Leu Leu Arg Leu Thr Gly Trp (SEQ ID NO: 417), Phe Tyr Gln Leu Ala Leu Tyr Trp (SEQ ID NO: 418), or Arg Lys Leu Phe Phe Asn Leu Arg Trp (SEQ ID NO: 419), classified in class 530, subclass 300.

The Examiner contends that the inventions are distinct, each from the other.

Applicants hereby provisionally elect, with traverse, Group I, claims 1-4, and 11-13, drawn to a hybrid antigen comprising at least one antigenic domain of an infectious agent or tumor antigen and a binding domain that non-covalently binds to a heat shock protein, classified in class 530, subclass 350.

In addition to election of one of the above inventions, the Examiner required election of one of the following species in the event that Group I or Group IV is elected:

Species 1: Asn Leu Leu Arg Leu Thr Gly Trp (SEQ ID NO:417);

Species 2: Phe Tyr Gln Leu Ala Leu Tyr Trp (SEQ ID NO:418); and

Species 3: Arg Lys Leu Phe Phe Asn Leu Arg Trp (SEQ ID NO:419).

In order to be fully responsive, Applicants hereby provisionally elect with traverse Species 1: Asn Leu Leu Arg Leu Thr Gly Trp (SEQ ID NO:417). Applicants also respectfully point out that, although the Examiner has identified the sequences as peptide linkers (see Office Action, page 5, second paragraph), the sequences are, as identified in claim 1, heat shock protein binding domains.

Applicant believes that new claims 27-44 are directed to products that fall within the invention of Group I; new claims 21-23 and claims 45-47 are directed to the processes that fall within the invention of Group II; and new claims 24-26 are directed to processes that fall within the invention of Group IV.


Upon the allowance of a product claim, Applicants request that any withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim be rejoined in accordance with the provisions of M.P.E.P. § 821.04. Presently, Applicant believes that the process claims 5-10, 14-19, 21-26 and 45-47 include all the limitations of a pending product claim within elected Group I.

Applicant fully reserves the right to prosecute the subject matter of the non-elected inventions in one or more related applications. In addition, Applicant retains the right to petition from the restriction requirement under 37 C.F.R. § 1.144.

Applicant respectfully requests that the above remarks and amendments be entered and made of record in the file history of the instant application.

Respectfully submitted,

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